

ENVIRONMENTAL EFFECT ON PHENOLOGY AND GROWTH PARAMETERS OF RICE CROP IN CHHATTISGARH PLAIN REGION

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Abstract: The results of phenological studies revealed that the days taken from sowing to seedling, tillering, panicle initiation, booting, panicle emergence, 50 percent flowering, milking, dough and maturity varied with different varieties. The results of growth characters revealed that plant height, number of filled grains per panicle, test weight, number of panicle per m², grain yield and harvest index at maturity were recorded maximum in Mahamaya as compared to Karma Mahsuri and MTU-1010. Whereas, the length of panicle and sterility percentage were recorded maximum in Karma Mahsuri while straw yield is maximum in MTU-1010. The results of dry matter accumulation, crop growth rate and relative growth rate showed that these were maximum in Karma Mahsuri, Mahamaya and MTU-1010.

Keywords: Environment, Phenology, Growth parameter, Rice crop

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